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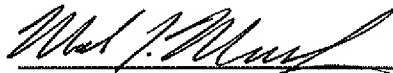
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in the following listed application(s) or patent(s) for which the issue fee has been paid.

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Respectfully Submitted,



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(12) **United States Patent**
Kadono et al.

(10) **Patent No.:** **US 7,402,467 B1**
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(54) **METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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H01L 21/84 (2006.01)

(52) **U.S. Cl.** **438/151; 438/704; 257/E21.561**

(58) **Field of Classification Search** 156/345;
438/151, 704; 204/192.5; 257/1; 65/60.5
See application file for complete search history.

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(57) **ABSTRACT**

A reduction in contaminating impurities in a TFT, and a TFT which is reliable, is obtained in a semiconductor device which uses the TFT. By removing contaminating impurities residing in a film interface of the TFT using a solution containing fluorine, a reliable TFT can be obtained.

32 Claims, 17 Drawing Sheets

